ENERGY TIDBITS

February 2004

Natural Building in Michigan workshops will be held on February 12 (Upland Hills Ecological Awareness Center, Oxford) and February 18 (The Green House, Ferndale) at 7:00-9:30 pm. Deanne Bednar will present slides and a video on straw bale construction. Contact Deanne at 248/628-1887.

Ann Arbor's Malletts Creek Branch Library is a unique model of sustainable design, featuring solar heating, natural daylighting, a vegetated green roof, convective cooling, naturally captured and filtered storm water, native plants and grasses and renewable materials. http://www.aadl.org/stories/storyReader \$94

PV Demonstration Project Grants are available to public and non-profit organizations to install and demonstrate a new 10 kW or larger solar photovoltaic system. An incentive payment of \$60,000 but not to exceed 90% of PV system equipment, material and supplies costs is offered to prospective applicants. A total of \$180,000 is available for projects. Proposals are due by April 15, 2004. To receive a copy of the Request For Proposal, please contact John Trieloff, (517) 241-6224 or email, jitriel@michigan.gov.

Tips for Architects working with green-minded residential clients. Useful web sites: http://www.lighting.com, http://www.lighting.com. One of the best ways to avoid making fluorescent lighting look institutional is to use indirect cove lighting. These fixtures bounce soft light off the ceiling, creating minimal glare. For the kitchen, lamps are now available in high-color rendering versions that make food look more appealing than under cool white light. Today's new T5 lamps are extremely slim and fit within compact fixtures. For control systems, use dual-technology sensors that use either infrared motion plus sound sensing, or infrared plus ultrasonic motion sensing. (Architectural Record, Nov 2003)

Waterless Urinals information can be found at the Energy Office web site at http://www.michigan.gov/documents/EO 12-04 82152 7.pdf

Renewable Energy Introductory Seminars will be held at the GLREA Energy Center in Dimondale on Saturday, February 21. There will be three seminars: Solar Water & Space Heating Systems, Solar Photovoltaic, and Wind Electricity. http://www.glrea.org

National Resources Defense Council new Southern California office reduces electricity consumption 60-75% by maximizing natural light and using efficient fixtures and appliances, task lighting, dimmable electronic ballasts, occupancy sensors, and extra insulation. Its air conditioning system uses "displacement ventilation," in which cool air is supplied at floor level to displace the hot air, which rises to the ceiling and is extracted from the building. The building also meets 20% of its electricity needs through rooftop solar cells. It is being considered by the U.S. Green Building Council for a LEED version 2 Platinum green building rating -- the highest possible level of sustainable design -- and may become the first structure in the United States to achieve this status. More at http://www.nrdc.org/cities/building/smoffice/intro.asp

Displacement Ventilation Systems, such as the one in the NRDC building, have the potential to improve indoor air quality while saving energy. Although many Scandinavian countries use them, the systems are less common in the US. To encourage their use, ASHRAE released new design guidelines for the systems in late October. See the ASHRAE press release at: http://www.ashrae.org/template/AssetDetail;? assetid=29163

American Wind Energy Association recently established a Small Wind Certification Committee, chartered with the development of a U.S. certification standard for small wind turbines. http://www.awea.org

ENERGY TIDBITS

February 2004

Page 2 of 2

Largest Battery Energy Storage System has begun operating near Fairbanks, Alaska. When complete, the grid-connected system will combine 13,670 nickel-cadmium battery cells to generate up to 40 MW of power for about 7 minutes, or 27 MW of power for 15 minutes. The system, operated by the Golden Valley Electrical Assoc. is expected to reduce power blackouts on the local power grid by more than 60%.

Sustainable Business Conference & Expo will be held in Ann Arbor on February 27. Breakout sessions include Resource Efficient Buildings, Industrial Energy Conservation Management, How U of M Saved Millions in Energy Costs, and Bio-Based Diesel. http://www.sbam.org/sustain

Moon-Driven Tidal Power is delivering electricity to homes in the far north of Norway. Energy comes from a sub-sea power station driven by the rise and fall of the tides, which are determined by the gravitational pull of the moon. The power system, which looks like an underwater windmill, will generate enough electricity for about 30 households.

State Energy Program Special Project Grants are available from the U.S. Dept. of Energy for a variety of energy projects: Clean Cities, Industrial Technology Program, Building Codes & Standards, Rebuild America, Building America, Federal Energy Management Program, Solar Technology Program, State Wind Energy Support, and Biomass. Applications can only be submitted by the Energy Office. The application due date to the Energy Office is March 12. If you are interested in working with the Energy Office on a potential grant application, contact the appropriate staff person listed:

<u>Tim Shireman</u> - <u>tashire@michigan.gov</u>

01A Clean Cities: Niche Markets / AFV Fleets 01B Clean Cities: Refueling Infrastructure

01C Clean Cities: School Buses 01D Clean Cities: Coalition Support 01E Clean Cities: Truck Idling 01F Clean Cities: Clean Cities Ferry 01G Clean Cities: E-85 Fueling Network

John Trieloff - jjtriel@michigan.gov

02 Industrial Technology Program07 Solar Technology Program

08 State Wind Energy Support

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Kelly Launder - klaund@michigan.gov

04 Rebuild America

10 Biomass

Pat Hudson - plhudso@michigan.gov

05 Building America

<u>Tom Krupiarz</u> - <u>takrupi@michigan.gov</u> 06 Federal Energy Management Program



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